

WORK PROCESS SCHEDULE
PNEUDRAULIC SYSTEMS MECHANIC
O*NET Code: 49-3011.00 RAIS CODE: 1107

Work Process Description	Hours
A. New Employee Orientation	40
1. Personal conduct	
2. Dress code policy	
3. Leave policy	
4. Shop description	
5. Chain of Command	
6. Competency-based training programs	
B. Safety Procedures	120
1. Safe work habits	
2. Risks and prevention of eye damage	
3. Risks and prevention of hearing damage	
4. Dangers and precautionary measures for rotating parts	
5. Electrical Hazards and Precautions	
C. Time and Attendance Documentation	40
1. Correct and accurate clocking procedures	
D. Tool Control	200
1. Use of pneudraulic hand tools	
2. Tool control accountability	
3. Tool inventory steps	
4. Use of precision measurement equipment	
5. Use of torque wrenches	
E. Technical Publications	200
1. Explanation of technical publications	
2. Making changes to technical publications	
3. Explanation of illustrated parts breakdown	
4. Explanation of overhaul manual	
5. Use of technical publications	
6. Technical publications deficiency reporting system	
7. Local engineering specifications	
F. Basic Trade Theory Related to Pneudraulics	200
1. Explain basic electricity	
2. Corrosion and corrosion control techniques	
3. Bearing handling and storage	
4. Balancing theory	
5. Hydraulic fluid/systems contamination and prevention	
6. Hydraulic contamination prevention techniques	
7. Soldering pneudraulic components	
8. Safety wiring purpose and procedures	

G. Trade Functions Related to Pneudraulics	200
1. Purpose of Industrial Engineering technicians (IETs)	
2. Functions of non-destructive inspection	
3. Functions of Quality Assurance	
4. Functions of Production Control	
5. Functions of Examiner/Evaluators	
H. Pneudraulic Physics	200
1. Boyle's Law	
2. Bernoulli's Principle	
3. Pascals Law	
4. Measuring units in Pneudraulic	
5. Basic math	
6. Conversion processes	
7. Functions of hydraulics and pneumatics	
I. Valves and Regulators	200
1. Functions of pressure regulators	
2. Regulator operating principles	
3. Disassembly of valves and regulators	
4. Assembly of valves and regulators	
5. Bench testing of valves and regulators	
6. Testing valves and regulators in test channel	
J. Starters and Turbines	400
1. Functions of starters and cooling turbines	
2. Starter and cooling turbine operating principles	
3. Disassembly of starters and cooling turbines	
4. Assembly of starters and cooling turbines	
5. Testing of starters and cooling turbines	
6. Balance rotor components	
K. Engine Driven Compressors (EDCs)	200
1. Functions of EDCs	
2. Operation Principles of EDCs	
3. Disassembly of EDCs	
4. Assembly of EDCs	
5. Testing EDCs in test cell	
6. Pre and post testing of EDC units	
L. Auxiliary Power Units (APUs) and Reduction Drives	400
1. Functions of APUs and reduction drives	
2. Operation Principles of APUs and reduction drives	
3. Disassembly of APUs and reduction drives	
4. Assembly of APUs and reduction drives	
5. Testing of APUs and reduction drives in test cell	
6. Shop balancing procedures	

M. Gas Turbine Compressors (GTCP) and Reduction Drives	400
1. Functions of GTCPs and reduction drives	
2. Principles of operation of GTCPs and reduction drives	
3. Disassembly of GTCPs and reduction drives	
4. Assembly of GTCPs and reduction drives	
5. Testing GTCPs and reduction drives	
6. Shop balancing procedures	
N. Fuel Controls and Accessories	400
1. Functions of fuel controls and accessories	
2. Principles of operation of fuel controls and accessories	
3. Disassembly of fuel controls and accessories	
4. Assembly of fuel controls and accessories	
5. Testing of fuel controls and accessories	
O. Hydraulic Motors/Pumps/Starters and Propeller Controls	800
1. Functions of hydraulic motors/pumps/starters and propeller controls	
2. Principles of operation of hydraulic motors/pumps/starters and propeller controls	
3. Disassembly of hydraulic motors/pumps/starters and propeller controls	
4. Assembly of hydraulic motors/pumps/starters and propeller controls	
5. Testing cell/stand safety requirements and procedures	
6. Test cell/stand operational sequences	
7. Testing of hydraulic motors/pumps/starters and propeller controls	
8. Pre and post test documentation	
P. Hydraulic Accumulators/Actuators/Servos and Winches	800
1. Theory and operation of hydraulic accumulators/actuators/servos and winches	
2. Disassembly of hydraulic accumulators/actuators/servos and winches	
3. Assembly of hydraulic accumulators/actuators/servos and winches	
4. Testing cell/stand safety requirements and procedures	
5. Test cell/stand operational sequences	
6. Testing of hydraulic motors/pumps/starters and propeller controls	
7. Pre and post test documentation	
TOTAL	4800

RELATED INSTRUCTION (RI) OUTLINE
Pneudraulic Systems Mechanic

Course Description	Hours
A. 6.2.96300 branch/shop orientation	64
B. 6.2.96300 pneudraulic related studies	156
C. Trade safety training	52
D. Production control	36
E. Miscellaneous related studies	80
F. Trade related CH-46/53 fuel/hydraulic/electro-pneudraulic	86
G. Electrical and hydraulic theory overview	8
H. Jet engine theories	94
	Total 576